

A NEW FRESH-WATER ISOPOD OF THE GENUS MANCASELLUS FROM INDIANA.

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The species herein described as new was collected by Mr. L. E. Daniels at Lily Lake, Laporte, Indiana, and sent to the United States National Museum. *Mancasellus danielsi* is the fifth known species of the genus *Mancasellus*, *M. brachyurus* Harger, *M. tenax* Harger, *M. macrourus* Garman, and *M. lineatus* (Say) having been previously made known, and one subspecies, *M. tenax dilatatus* Harger.

Family ASELLIDÆ.

MANCASELLUS Harger.

MANCASELLUS DANIELSI, new species.

Body broadly oval, with lateral parts of segments widely expanded. Head broader posteriorly than anteriorly, the posterior part being as wide as the first thoracic segment. Lateral margins have a deep and wide incision which separates the narrower anterior lobes from the widely expanded posterior lobes. The eyes are opposite these incisions. The frontal margin is produced in a small median point, on either side of which is a shallow depression, followed by another point, in turn succeeded by a slight depression. The antennulæ are short, reaching only to the extremity of the fourth joint of the peduncle of the antennæ; the flagellum contains eight joints. The antennæ are very long, extending nearly the entire length of the body. The mandible is without a palp.

The thoracic segments are subequal in length. The lateral parts are widely expanded, with lateral margins entire.

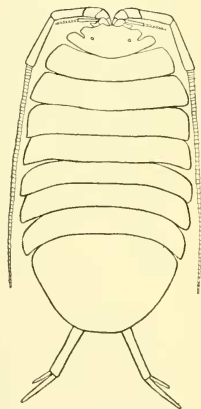


FIG. 1.—MANCASELLUS DANIELSI.  $\times 31$ .

The caudal segment is narrower posteriorly than anteriorly, with the end obtusely rounded. Width of segment at base about one and one-half times its length.

The caudal stylets are long and slender, the length of the stylet being equal to the length of the caudal segment. The basal joint is equal to the length of the fifth peduncular joint of the antennae. The outer branch is half as long as the inner branch.



FIG. 2.—MANDIBLE OF MANCASELLUS DANIELI.

The first pair of legs are subchelate. The propodus is broadly expanded and armed on the inner margin with a large tooth about halfway between the base and the articulation of the joint with the dactylus. Between the tooth and the articulation of the dactylus with the propodus is a process having a blunt, truncate extremity. The dactylus is provided with two teeth near the base on the inner margin. The carpus is small and triangular in shape. The merus is produced at the upper outer angle.

The remaining six pairs of legs are similar in structure and ambulatory in character, with biunguiculate dactyli.

Three specimens were found at Lily Lake, Laporte, Indiana, by Mr. Daniels.

*Type*.—Cat. No. 25693, U.S.N.M.



FIG. 4.—LEG OF FIRST PAIR OF MANCASELLUS DANIELI.  $\times 14\frac{1}{2}$ .

This species is more closely related to *M. tenax* Harger than to any other species of the genus. It differs, however, from *M. tenax* in the greater length of the antennae, which extend nearly the entire length of the body, while in *M. tenax* they are only half the length of the body; in the greater width of the caudal segment in proportion to its length, the width being one and one-half times the length,

while in *M. tenax* the width and length of this segment are about equal; in the greater length of the caudal stylets, which are equal to the length of the caudal segment, while in *M. tenax* they are only a little longer than half the length of the caudal segment; in the greater length of the basal segment of the stylet, its length being equal to the length

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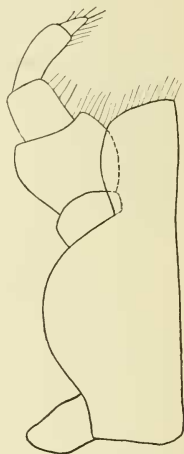


FIG. 3.—MAXILLIPED OF MANCASELLUS DANIELI. GREATLY ENLARGED.

of the fifth joint of the peduncle of the antennæ, while in *M. tenax* it is equal to the length of the fourth joint of that organ (the fourth joint of the peduncle of the antennæ in both species being shorter than the fifth joint); in the greater breadth of the entire body in proportion to its length, *M. tenax* being narrower in width as compared to its length; and in the difference in the legs of the first pair, the propodus in *M. tenax* being armed with one broad low tubercle (in the sub-species *dilata* the propodus is armed with three acute teeth), while in *M. danielesi* the propodus is armed with one large tooth and one bluntly ending, truncate process, the dactylus being provided with two teeth at the base, the dactylus in *M. tenax* being armed with spines on the inner margin, of which the distal ones are the larger, and at the end with a large spine.

This species differs from *M. lineatus* (Say) in having antennæ somewhat shorter, in the fact that the propodus of the first pair of legs is provided with a bluntly ending process between the long tooth, situated about the middle on the inferior margin, and the articulation of the dactylus with the propodus; and in the longer outer branch of the caudal stylets, it being half as long as the inner branch, while in *M. lineatus* it is only one-third the length of the inner one.

Named for Mr. L. E. Daniels, by whom the specimens were collected.